

**REDACTED**

SITE: V.C. Chemical Social Cir

BREAK: 2.2

OTHER: v. 41

**BBL**<sup>®</sup>  
BLASLAND, BOUCK & LEE, INC.  
engineers, scientists, economists

*Transmitted Via First Class Mail*

December 9, 2005

[REDACTED]  
121 Dove Landing  
Social Circle, GA 30025

Re: Soil Sampling Data Summary Report for  
121 Dove Landing, Social Circle, GA  
BBL Project #: 85533

Dear [REDACTED]

On August 29, 2005 and with your permission, Blasland, Bouck & Lee, Inc. (BBL) collected soil samples from your property located at 121 Dove Landing in Social Circle, Georgia. These activities were performed on behalf of Exxon Mobil Corporation (ExxonMobil) to provide data to evaluate the potential impacts of a former fertilizer manufacturing plant whose facilities appear to have been located in the vicinity of the property.

All soil samples collected were tested in the field to determine the approximate levels of arsenic and lead, which research has shown may be related to past operations of the former fertilizer plant. Based on these field test results, select samples were submitted to, and analyzed by, a laboratory approved by the United States Environmental Protection Agency (USEPA).

The purpose of this letter is to describe the soil sampling activities that were performed at your property and to present the results. Also included are photos of the inspection that was performed to document the condition of your property at the time of sampling (Attachment 1). Copies of this report are being submitted to the USEPA.

#### Soil Sample Collection Activities

Prior to sampling, the locations of underground utilities were identified by a utility locating service to minimize the possibility of disrupting services to the property and protect the safety of the workers.

Two types of soil samples were collected from your property as follows:

- Surface soil samples were collected from 0 to 6 inches below ground surface from five locations in both the front and back yards. The five front yard surface samples were mixed together in equal amounts and then tested in the field to determine the approximate concentrations of arsenic and lead. Field testing was performed using a portable X-ray fluorescence (XRF) device. The front yard mixed sample was then sent to the laboratory for analysis. This process was repeated for the five backyard samples. All samples submitted to the laboratory were analyzed for metals (including arsenic and lead) and pH (soil acidity).



- Deeper soil samples were collected from one location in the front yard and one location in the back yard. The locations of these deeper soil samples are shown on Figure 1. Samples were collected using hand augers or by pushing hollow steel tubes into the ground to the required sample depth. At each location, soil samples were collected from 0.5 to 2 feet, 2 to 4 feet, 4 to 6 feet, and 6 to 8 feet below ground surface. These samples were tested in the field using the XRF device described above to determine the approximate concentrations of arsenic and lead. Based on these results, select samples were sent to the laboratory and analyzed for metals (including arsenic and lead) and pH (soil acidity).

A list of the soil samples collected from your property is provided in Table 1.

### **Results of the Soil Sampling**

The USEPA has established screening levels (i.e., levels that trigger additional assessment and evaluation) for metals. Field measurements and laboratory analytical results indicate that the concentrations of arsenic and lead are below the USEPA's screening levels of 27 milligrams per kilogram (mg/kg) and 400 mg/kg, respectively. Laboratory analytical results indicate that iron and vanadium were detected above the USEPA screening levels in the samples collected from your property. Laboratory analytical results for the soil samples collected from your property are provided in Table 2.

### **Conclusion**

As described above, all soil samples collected at your property contained concentrations of arsenic and lead **below** USEPA's screening levels of 27 mg/kg and 400 mg/kg, respectively. According to USEPA, the arsenic and lead concentrations are protective of human health and the environment. Laboratory analytical results indicate that iron and vanadium were detected above the USEPA screening levels in the samples collected from your property. ExxonMobil is submitting these results to the USEPA. We will work with these agencies to determine what further actions (if any) are necessary for your property, and will keep you informed. Any necessary actions for your property will be described in the upcoming *Removal Action Delineation Report/Removal Action Work Plan* that will be prepared by BBL on behalf of ExxonMobil and reviewed and approved by USEPA. This plan will be prepared upon completion of all sampling activities required by USEPA.

Thank you once again for granting ExxonMobil access to your property to conduct these soil sampling activities.

Sincerely,

BLASLAND, BOUCK & LEE, INC.



Geoffrey G. Germann, P.E.  
Senior Engineer II

GGG/cbc

Information Redacted pursuant to 5 U.S.C.  
Section 552 (b)(6), Personal Privacy

Exemption 7 ☐ (A) Interference with Enforcement Proceedings  
☐ (B) Right to Fair Trial  
☒ (C) Unwanted Invasion of Personal Privacy

Enclosures:

Table 1 – Summary of Analytical Program for Samples Collected from 121 Dove Landing

Table 2 – Summary of Analytical Results for Detected Metals in Soil Samples Collected from 121 Dove Landing

Figure 1 – Sample Location Map for 121 Dove Landing

Attachments:

Attachment 1 – Photographs

cc: D. Andrews, USEPA  
B. Frink, ExxonMobil  
R. Wallis, ExxonMobil  
M. Ross, ExxonMobil

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Information Redacted pursuant to 5 U.S.C.  
Section 552 (b)(6), Personal Privacy

Exemption 7 ☐ (A) Interference with Enforcement Proceedings  
☐ (B) Right to Fair Trial  
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## ***Tables***

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**Table 1**  
**Summary of Analytical Program for Samples Collected from 121 Dove Landing**  
**Social Circle, Georgia**

Sample Name	Depth (feet)	Sample Date	Arsenic and Lead Field Measurement	Laboratory Measurement		Comments
				Metals	pH	
Front Yard Samples						
SCSB-121DL-1	0-0.5	08/29/05	X	X	X	Combination (composite) surface soil sample of five locations from the front yard.
SCSB-121DL-1	0.5-2	08/29/05	X	X	X	Soil sample collected from the front yard
SCSB-121DL-1	2-4	08/29/05	X	X	X	Soil sample collected from the front yard
SCSB-121DL-1	4-6	08/29/05	X			Soil sample collected from the front yard not analyzed because arsenic and lead in the 2-4 foot interval were below USEPA screening levels.
SCSB-121DL-1	6-8	08/29/05	X			Soil sample collected from the front yard not analyzed because arsenic and lead in the 2-4 foot interval were below USEPA screening levels.
Back Yard Samples						
SCSB-121DL-2	0-0.5	08/29/05	X	X	X	Combination (composite) surface soil sample of five locations from the back yard.
SCSB-121DL-2	0.5-2	08/29/05	X	X	X	Soil sample collected from the back yard
SCSB-121DL-2	2-4	08/29/05	X	X	X	Soil sample collected from the back yard
SCSB-121DL-2	4-6	08/29/05	X			Soil sample collected from the back yard not analyzed because arsenic and lead in the 2-4 foot interval were below USEPA screening levels.
SCSB-121DL-2	6-8	08/29/05	X			Soil sample collected from the back yard not analyzed because arsenic and lead in the 2-4 foot interval were below USEPA screening levels.

**Notes:**

1. Samples depths are measured in feet below ground surface.
2. Laboratory measurements were performed by TestAmerica, Inc. of Nashville, Tennessee.
3. Sample locations are shown on Figure 1.

**Table 2**  
**Summary of Analytical Results for Detected Metals in Soil Samples Collected from 121 Dove Landing**  
**Social Circle, Georgia**

Analyte	Screening Level	Units	Concentration in Sample:					
			SCSB-121DL-1	SCSB-121DL-1	SCSB-121DL-1	SCSB-121DL-2	SCSB-121DL-2	SCSB-121DL-2
			0 - 0.5 ft bgs 8/29/2005	0.5 - 2 ft bgs 8/29/2005	2 - 4 ft bgs 8/29/2005	0 - 0.5 ft bgs 8/30/2005	0.5 - 2 ft bgs 8/30/2005	2 - 4 ft bgs 8/30/2005
<b>Metals</b>								
Aluminum	76000	mg/kg	25800	20900	17500	15800	19800	12000
Antimony	31	mg/kg	12 U	11.2 U	1.24 J	12 U	12.4 U	11.7 U
Arsenic	27	mg/kg	4.61	5.1	4.61	5.78	6	3.52
Barium	5400	mg/kg	47.3	45.6	33.2	24.7	19.3	13.4
Cadmium	37	mg/kg	0.768 J	0.562 J	0.561 J	0.772 J	0.987 J	0.723 J
Calcium	--	mg/kg	371	288	409	583	306	169
Chromium	210	mg/kg	27.2	31.3	34.1	26.9	35	24.4
Cobalt	900	mg/kg	2.86	3.62	2.01	1.24	0.74 J	1.26
Copper	3100	mg/kg	18.8	21.7	18.2	13.6	16.3	14.8
Iron	23000	mg/kg	36800	30100	27800	36400	48100	37400
Lead	400	mg/kg	17.5	66	59.8	13.5	14.1	16.9
Magnesium	--	mg/kg	1090	670	273	251	127	149
Manganese	1800	mg/kg	129	189	101	114	124	91.7
Mercury	23	mg/kg	0.12 U	0.0931 J	0.0736 J	0.0552 J	0.113 J	0.121 U
Nickel	1600	mg/kg	3.89	3.95	2.34	1.2 U	2.89	2.22
Potassium	--	mg/kg	1150	625	263	344	287	126
Selenium	390	mg/kg	R	R	R	2.53 J	R	R
Vanadium	78	mg/kg	68.7	52.4	48.1	67.5	83.5	62.6
Zinc	23000	mg/kg	32.1	29.4	25.8	19.2	13.9	9.33 J
<b>Miscellaneous</b>								
% Dry Solids	--	%	83.4	86.1	84.7	83.2	80.9	82.6
pH	--	pH Units	5.0	5.4	5.3	4.6	4.2	4.2

**Notes:**

bgs - below ground surface

J - estimated value

mg/kg - milligrams per kilogram

U - not detected

-- no screening level

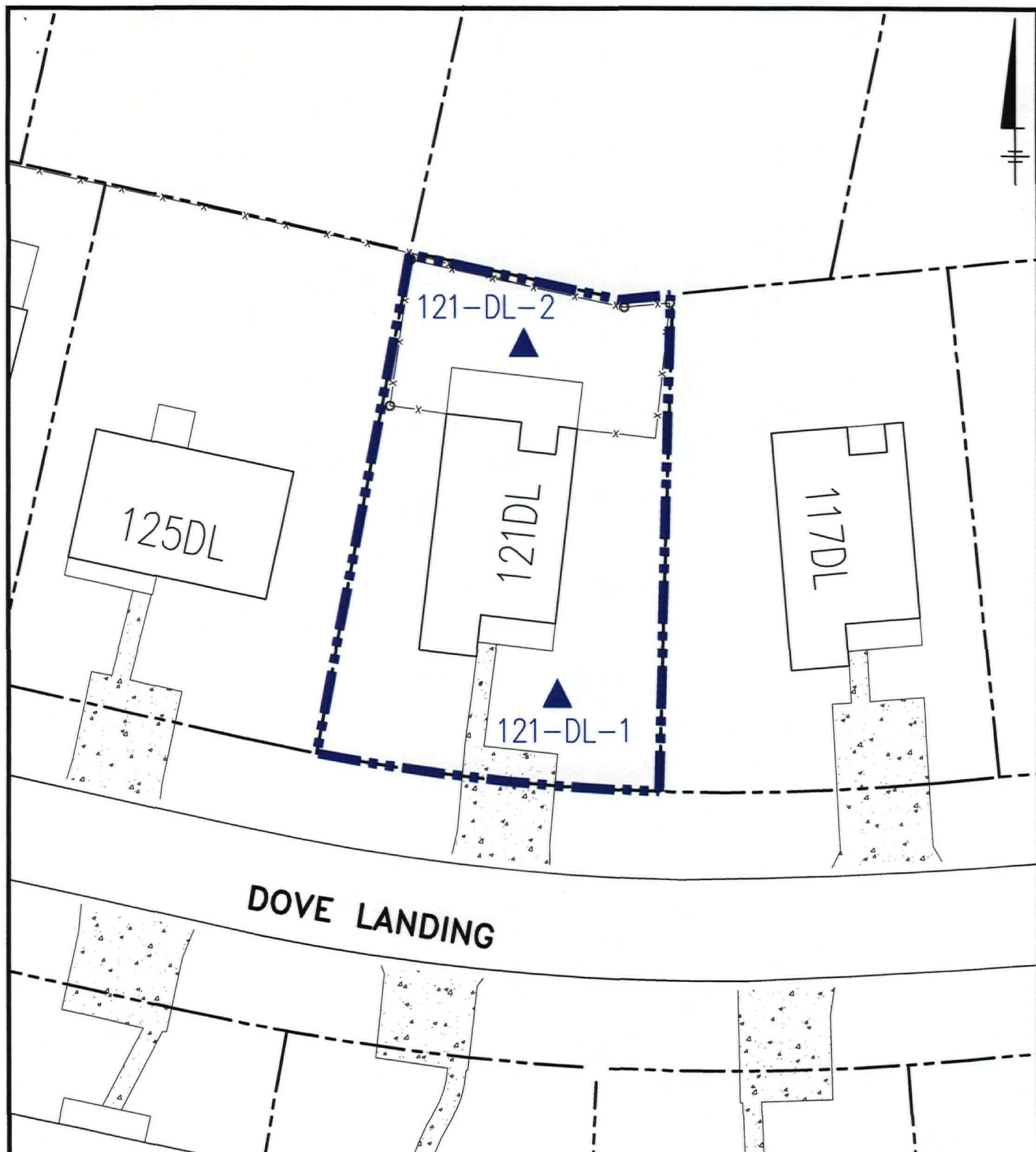
R - data has been rejected

Shaded value exceeds the screening level



**Figure**

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**LEGEND:**

- - - - - PROPERTY LINE  
 [stippled pattern] CONCRETE  
 - X - FENCE LINE

▲ SOIL BORING LOCATION

0 30' 60'  
GRAPHIC SCALE

EXXONMOBIL  
VCC - SOCIAL CIRCLE, GEORGIA

**SAMPLE LOCATION MAP FOR  
121 DOVE LANDING**

**BBL**  
BLASLAND, BOUCK & LEE, INC.  
engineers, scientists, economists

FIGURE  
**121DL**

X: 85533X0P, X02.DWG  
 P: PLT-AP1  
 10/31/05 CAR-B5-LEE  
 R: \CURRENT\OTHER\85533004\PR\85533G27.DWG



# ***Attachment***

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Attachment 1  
Photographs of 121 Dove Landing, Social Circle, GA



121 Dove Landing, southern edge looking north.



121 Dove Landing, southern edge looking north.



Attachment 1  
Photographs of 121 Dove Landing, Social Circle, GA



121 Dove Landing, southern edge looking north.



121 Dove Landing, northern edge looking west.

Attachment 1  
Photographs of 121 Dove Landing, Social Circle, GA



121 Dove Landing, eastern edge looking south.

Revised: 1/1/10  
Project: 121 DL